# ABSTRACT

*PT. ABC is a company engaged in aquaculture that makes fish and shrimp feeding products automatically. In the product assembly process, there are several processes carried out, including dosing sub assembly, thrower sub assembly, container sub assembly, main assembly, and storing process. Of all the work processes carried out, there is still no application of good work safety so that a risk analysis is needed to determine the potential failure mode that occurs and recommendations are given so that the potential failure mode can be minimized The purpose of this study is to identify the risks and causes of events to sources that have the potential to cause the highest risk factors in the smartfeeder assembly process. The methodology used in this study begins with identifying the risk of work accidents based on the work done. After the failure mode is obtained, then the scale is given for severity, occurrence, and detection based on the reference used. In determining the priority of handling the highest risk in this study using Failure Mode and Effect Analysis (FMEA). The result of the FMEA is the RPN (Risk Priority Number) which is the result of multiplication of severity, occurrence, detection, after the RPN results from each failure mode are obtained, the highest RPN value is chosen to be given recommendations so that this work accident can be avoided. The results of this study are the results of safety risk analysis in the smartfeeder assembly work process to be given a risk treatment proposal based on the highest RPN value so that the potential for accidents can be minimized.*



***Keywords: Work Accident, Failure Mode and Effect Analysis, Risk Priority Number, Severity, Occurrence, Detection***